

Due Date: July 23, 2007

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:	)	
	)	
Inventor: Craig Storms et al.	)	Examiner: Jacob F. Betit
	)	
Serial #: 10/038,071	)	Group Art Unit: 2164
	)	
Filed: January 4, 2002	)	Appeal No.: _____
	)	
Title: LIGHTWEIGHT SELF-CONTAINED	)	
SELF-EXPANDING PRODUCT DATA	)	
<u>PACKAGE</u>	)	

**BRIEF OF APPELLANTS**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR §41.37, Appellants hereby submit the Appellants' Brief on Appeal from the final rejection in the above-identified application, as set forth in the Office Action dated September 19, 2006 and the Notice of Non-Compliant Appeal Brief mailed on June 21, 2007.

No fee is due at this time as the fee was charged with the filing of the original Appeal Brief. Nonetheless, please charge any additional fees or credit any overpayments to Deposit Account No. 50-0494 of Gates & Cooper LLP.

**I. REAL PARTY IN INTEREST**

The real party in interest is Autodesk, Inc., the assignee of the present application.

## II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences for the above-referenced patent application.

## III. STATUS OF CLAIMS

Claims 1-89 remain pending in the application.

Claims 1-11, 25-37, 51-63, and 77-89 have been withdrawn from consideration.

Claims 12, 14-24, 38, 40-50, 64, and 66-76 stand rejected.

Claims 13, 39, and 65 have been objected to as being dependent on a rejected base claim but would be allowable if rewritten to include limitations of the independent claims on which they depend.

The rejections of claims 12, 14-24, 38, 40-50, 64, and 66-76 are being appealed.

## IV. STATUS OF AMENDMENTS

No amendments to the claims have been made subsequent to the final Office Action.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claims 12, 38, and 64 are generally directed to the generation of a self-expanding data package for product data (see paragraph [0006]-page 3, lines 14-20, FIG. 7). Specifically, values in a set of constant lists are generated and stored in the data package (see paragraphs [0030]-[0032]- page 8, line 20-page 9, line 14, [0036]-page 10, lines 11-15, and [0061]-page 21, lines 2-8, FIG. 7 - 700 and 702). In addition, calculations (that operate on the values) are generated and stored in the data package (see paragraphs [0030]-[0032]- page 8, line 20-page 9, line 14, [0037]-page 10, line 18-page 11, line 4, and [0061]-page 21, lines 2-8, FIG. 7 - 704).

Once the values and calculations are stored in the data package, the data package is transmitted to a second computer system that expands the data package (see paragraphs [0065]-page 21, line 24-page 22, line 5 and [0067]-page 22, lines 16-20). The claim limitations provide that the package is expanded into a table having rows (see paragraph [0067]-page 22, lines 16-20, FIG. 7 - 708). In addition, the expansion is performed by combining each value with other parameters (i.e., in the data package, FIG. 7 - 708) and performing the calculations (from the data package) on the values (see paragraph [0067]-page 22, lines 16-20; FIG. 7 - 708). As claimed, each expanded row of

the table represents a product and comprises one of the combinations (see paragraphs [0006]-page 3, lines 14-20, [0007]-page 3, line 21-page 4, line 3, [0026]-page 7, line 22-page 8, line 4, [0057]-page 19, line 23-page 20, line 4, [0067]-page 22, lines 16-20, and [0068]-page 22, line 21-page 23, line 2; FIG. 7 - 708). Further, as amended, the calculations eliminate one or more rows from the table (see paragraphs [0007]-page 3, line 21-page 4, line 3, [0064]-page 21, lines 19-22, [0066]-page 22, lines 6-15, and [0068]-page 22, line 21-page 23, line 2; FIG. 7 - 708). Accordingly, all of the information for expanding the data package is contained within the data package itself. In other words, the values for the set of constant lists and the calculations performed on the values are both generated and then stored in the data package.

In addition, Applicants note that the claims explicitly provide for and recite product data and that each row represents a product (see paragraphs [0026]-page 7, line 22-page 8, line 4, [0057]-page 19, line 23-page 20, line 4, [0067]-page 22, lines 16-20, and [0068]-page 22, line 21-page 23, line 2; FIG. 7 - 708). Accordingly, the invention is specific to product data. The invention solves a specific problem with publishing and consuming product data by packaging up all part properties for a related family of parts in a compact form, with a mechanism defined for assembling the individual properties into normalized tables. The invention affects both the publishers and consumers of this part data in a way that they must understand.

## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-11, 25-47, 51-63, and 77-89 stand withdrawn as having being directed towards an invention distinct from claims 12, 14-24, 38, 40-50, 64, and 66-76.

Claims 12, 16, 18-21, 23-24, 38, 42, 44-47, 49-50, 64, 68, 70-73, and 75-76 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hind et al. (U.S. Patent No. 6,635,088 B1) (Hind).

Claims 14-15, 40-41, and 66-67 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hind in view of Sasaki et al. (U.S. Patent No. 6,434,623)(Sasaki).

Claims 17, 43, and 69 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hind in view of Shiba (U.S. Patent No. 6,480,124 B2)(Shiba).

Claims 22, 48, and 74 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hind in view of the Examiner's Official Notice (Official Notice).

## VII. ARGUMENTS

A. Claims 12, 16, 18-21, 23-24, 38, 42, 44-47, 49-50, 64, 68, 70-73, and 75-76 are Patentable under 35 U.S.C. §103(a) over Hind et al. (U.S. Patent No. 6,635,088 B1) (Hind).

### *1. Independent Claims 12, 38, and 64 Are Patentable Over The Prior Art*

Applicants traverse the rejections set forth in the final Office Action for one or more of the following reasons:

- (1) Hind fails to teach, disclose or suggest a single package that contains both a set of constant lists and calculations that are performed on combinations of the constant lists;
- (2) Hind fails to teach, disclose or suggest such calculations that eliminate rows/combinations of such constant lists;
- (3) Hind fails to teach, disclose or suggest a table;
- (4) The Official Notice is without merit and improper.

Applicants note that Hind is merely a mechanism to compress XML and related files using a string substitution mechanism. Such a solution bears no relationship to the kind of data being stored, or the processing of that data. It is a generic compression mechanism based on repeating strings in XML and related structured text files. (See Abstract). The present invention is dissimilar from the prior art in that it is not a hidden algorithm that takes any generic XML file and makes it smaller.

In rejecting the claims, the Office Action first asserts that col. 7, lines 38-67 teaches the generation of values in a constant list and storing of the values in the self expanding data package. Col. 7, lines 38-67 provides:

In the preferred embodiment, the present invention is implemented as one or more computer software programs. The implementation of the software that compresses XML and/or DTD files may operate on a server in a network, as one or more modules (also referred to as code subroutines, or "objects" in object-oriented programming) which are invoked upon request. Alternatively, the compression software may operate on a user's workstation. The logic implementing this file compression may be integrated with the code of a program which creates the XML or DTD files, or it may be implemented as one or more separate utility modules, which provide compression that is performed after the XML or DTD file has been created, without deviating from the inventive concepts disclosed herein. Similarly, the file decompression software (where applicable, as discussed in detail below) may operate on a server, or on a user's workstation, and this software may be provided in one or more separate utility modules that are invoked to decompress the file content before using it in an application, or it may be integrated into an application that processes the files. The server may be functioning as a Web server, where that Web server provides services in response to requests from a client connected through the Internet. Alternatively, the server may be in a corporate intranet or extranet of which the client's workstation is a component, or in any other network environment. While the preferred embodiment anticipates that the compressed files are sent over a network connection, the file content may also be transferred between computers via a storage media (such as diskette), without deviating from the inventive concepts disclosed herein.

As can be seen from this text, there is not even a remote reference to constant lists or a self-expanding data package for product data as claimed.

Similarly, to teach the generation of calculations that operate on values in the constant lists and the storage of the calculations in the self expanding data package, the Office Action relies on col. 8, lines 44 through col. 9, line 40. This portion of text merely describes the ability to substitute text using an entity declaration. However, once again, there is no constant list, nor is there a calculation that operates on values in such a constant list.

The Office Action then proceeds to assert that the claimed table that is generated from the self-expanding data package with rows is taught by Hind Col. 8, lines 25-59 and col. 9, lines 30-41. Applicants respectfully disagree with and traverse such an assertion. Firstly, such text does not even reference, suggest, or allude to a table in any way shape or form. In addition, the claims are specific in the limitations and description of the table. Namely, the claims provide that the table has expanded table rows, with each row representing a product, and each row is a combination that is generated by combining every value in each constant list with any combination of values from remaining parameters and performing calculations on the values, wherein the calculations eliminate one or more table rows. Instead of discussing tables and table rows that are generated by combining various values and the elimination of rows, Hind merely describes the substitution of text. Such a teaching not only fails to teach or remotely suggest the invention, but is not even related or relevant to the present claims whatsoever. Again, the claims provide specific details relating to tables and table rows. Hind fails to reference or describe any such table, rows in a table, or the elimination of such rows, explicitly or implicitly. Without even suggesting the use of such a table and the claimed table row limitations, Hind cannot possibly teach, anticipate, or render the present invention obvious.

Further, Sasaki fails to cure the deficiencies of Hind. Moreover, the various elements of Applicants' claimed invention together provide operational advantages over Hind and Sasaki. In addition, Applicants' invention solves problems not recognized by Hind and Sasaki.

In response to the above arguments, the final Office Action indicated that product data was non-functional descriptive material and could not render non-obvious claim limitations that would otherwise be obvious. The final Office Action further indicated that there was nothing in Hind that prohibited the XML data from being product data. Appellants respectfully disagree with and

traverse such assertions. Appellants submit that the manner and context in which the claims provide and refer to product data is not in a non-functional descriptive manner. Namely, as illustrated throughout the specification (specifically, the examples of product data on pages 11-15), products often have small differences but if every variation of a product were presented, it would consume excessive space and be impractical to transmit and work with. Appellants refer the Board to paragraphs [0002]-[0005] (page 2, line 8-page 3, line 11) of the specification as filed that sets forth the rationale and problems with product data of the prior art. Accordingly, the ability and recitation of product data in the claims provides a functional advantage that was not available in the prior art including Hind.

In addition, Applicants note that dependent claims 17, 43, and 69 provide that the self-expanding data package comprises product data for use in a CAD design application. In rejecting these claims, the Examiner took official notice that it would have been obvious to modify Hind to include the self-expanding data package comprises product data for use in a CAD application because it would allow information from one engineer using a CAD program to be transmitted to another engineer using a CAD program in an efficient manner.

Applicants appreciate the acknowledgement of the benefits of the present invention. However, not only is there a complete failure in Hind to even remotely suggest such product data (which is not claimed in the independent claims), but there is no suggestion to extend Hind into such an area and it would not be obvious for an engineer to utilize the method of the invention to transport product data as claimed. In this regard, the Examiner takes Official Notice of the obviousness of the invention without any foundation or support in the prior art whatsoever. Applicants note that it is improper to take Official Notice of the obviousness of the invention. Instead, Official Notice is only proper for a fact. In this regard, the present Office Action fails to take Official Notice of any such fact.

Further, under MPEP 2144.03, there must be some form of evidence in the record to support an assertion of common knowledge. See *Lee*, 277 F.3d at 1344-45, 61 USPQ2d at 1434-35 (Fed. Cir. 2002); *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697. There is no form of such evidence in the present record.

In addition, in accordance with MPEP 2144.03(C), Applicants previously challenged the Official Notice and any factual assertion contained therein as not properly officially noticed or not properly based upon common knowledge. In this regard, Applicants requested that under MPEP

2144.03(C), the Examiner must provide support for the finding/Office Notice with adequate documentary evidence. Applicants submitted that the examiner was required to provide documentary evidence if the rejection was to be maintained. See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 ("[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings" to satisfy the substantial evidence test). However, to date, the Examiner has failed to provide such evidence.

In addition, the fact that the prior art fails to recite that something is not prohibited has no weight whatsoever. The standard for determining non-obviousness is not whether a reference fails to prohibit what the invention performs. Under MPEP §2142 and 2143.03 "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)." Further, under MPEP §2141.01, "The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention". It is not Appellants obligation to disprove that a reference has or does not have any characteristics that would prevent it from being combined with another reference. Instead, under MPEP 2143, it is the Examiner's obligation to set forth a *prima facie* case of obviousness. As part of establishing the case, the Examiner must meet three criteria: he must show that some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In this regard, the lack of a prohibition of the claimed invention in the cited reference is wholly and completely irrelevant.

The final Office Action continues and states:

The compressed XML files are a "self expanding" data package because the information within the file is the only information needed to expand the files all of the necessary data and calculations are contained within. The constant list (only one is required by the claim) is the XML data in its compressed format. This list is the same as the original XML data only with common strings removed and replaced with entity names.

Appellants respectfully disagree with and traverse the above assertions. Appellants refer to

the Board to the arguments above. Namely, the claims explicitly recite the generation of a table and the elimination of rows in the table and not merely the substitution of text as in Hind. Thus, the claims provide for significantly more than merely expanding a package by substituting text.

The final Office Action continues with respect to the calculation aspect of the claims and states (on page 11):

The entities represent the calculations that must be done to decompress the XML data. The calculation is for each “entity\_name” of the XML document replace with “the text string for the entity.”

Appellants again respectfully disagree with and traverse such an argument. The claims provide for the expansion of a table into rows and the use of calculations that eliminate certain rows. A calculation that substitutes a text string for an entity does not in any way shape or form eliminate rows of a table. There is not even a remote similarity between the two teachings. In this regard, Appellants submit that because the differences between Hind and the present invention are so expansive, it is improper to compare the text substitution with the calculations as claimed.

The final Office Action continues (on page 11) addressing the arguments relating to a table as follows:

Hind et al. represents the table in XML form (see figures 3A and 3B, where each <Order> tag would be a new row, and <Order\_Nbr>, <Customer\_Nbr>, <Customer\_Name>, and <Ship\_To\_Address> represent columns, much the same way tables are represented in XML form in the present application, see paragraph 0042 of the specification. Further, Hind et al, mentions storing the data as elements in a database (see column 8, lines 10-15).

Appellants respectfully disagree with and traverse the above assertions. Hind’s FIGs. 3A and 3B merely “illustrate a simple example of a fragment of a document file, before and after applying the string compression technique of the present invention.” (see page 5, lines 25-28). Thus, rather than illustrating a table with rows being eliminated, the figures merely illustrate how to compress a full address into an abbreviated address (i.e., “&A”) in accordance with Hind’s teaching. There is no capability or ability within the cited text to eliminate a row entirely or to produce an expanded table having a list of products as claimed. Again, there is no similarity between Hind and the present invention.

Further, paragraph 0042 of the present specification provides:

**[0042]** The following XML may be used to represent the basic table, three constant lists, and validation calculation.



```

<?xml version="1.0"?>
<pPackage desc="Product Package Sample">
  <Column name ="EngineStyle" dataType="string">
    <Row id="r0">2AGX-05HP</Row>
    <Row id="r1">2AGX-08HP</Row>
    <Row id="r2">2AGX-10HP</Row>
  </Column>
  <Column name ="EngineSize" dataType="float" unit="Liter">
    <Row id="r0">0.50</Row>
    <Row id="r1">1.00</Row>
    <Row id="r2">1.50</Row>
  </Column>
  <Column name ="PowerRating" dataType="float" unit="HP">
    <Row id="r0">5.0</Row>
    <Row id="r1">8.0</Row>
    <Row id="r2">10.0</Row>
  </Column>
  <ConstantList name="StartMechanism" dataType="string">
    <Item id="i0">Pull</Item>
    <Item id="i1">Battery</Item>
    <Item id="i2">Plug-in</Item>
  </ConstantList>
  <ConstantList name="ScoopHeight" dataType="float" unit="inch">
    <Item id="i0">14.00</Item>
    <Item id="i1">18.00</Item>
    <Item id="i2">24.00</Item>
  </ConstantList>
  <ConstantList name="Color" dataType="string">
    <Item id="i0">Red</Item>
    <Item id="i1">Green</Item>
    <Item id="i2">Beige</Item>
  </ConstantList>
  <Calculation desc="Conditional Test 1 Engine less than 8 HP" dataType="bool"
name="CT1"
    context="Conditional_Test">$PowerRating &lt; 8</Calculation>
  <Calculation desc="Conditional Test 2 Scoop greater than 14" dataType="bool"
name="CT2"
    context="Conditional_Test">$ScoopHeight &gt; 14</Calculation>
  <Calculation desc="Validation Test 1 Large Gauge Rule" dataType="bool" name="VT1"
    context="PartSizeValidation_Test">1 - ($CT3*$CT4)</Calculation>
  <Calculation desc="Part Name" dataType="string" name="Name"
    context="Catalog_PartSizeName">FormatNumber($PowerRating,0) + " HP " +
    "$Color $ScoopHeight inch max height $StartMechanism Start Snow
Blower"</Calculation>
</pPackage>

```

Paragraph [0042] illustrates the XML representation of the table BEFORE the expansion as set forth in the claims. After the expansion, the various items are combined producing the result illustrated in Summary Table A:

Part Name	Engine Style	Engine Size	Power Rating	Scoop Ht.	Start Mech.	Color
5 HP Red 14" max height Pull Start Snow Blower	2AGX-05HP	0.5 Liter	5 HP	14"	Pull	Red
8 HP Red 14" max height Pull Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	14"	Pull	Red
10 HP Red 14" max height Pull Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	14"	Pull	Red
8 HP Red 18" max height Pull Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	18"	Pull	Red
10 HP Red 18" max height Pull Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	18"	Pull	Red
8 HP Red 24" max height Pull Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	24"	Pull	Red
10 HP Red 24" max height Pull Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	24"	Pull	Red
5 HP Red 14" max height Battery Start Snow Blower	2AGX-05HP	0.5 Liter	5 HP	14"	Battery	Red
8 HP Red 14" max height Battery Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	14"	Battery	Red
10 HP Red 14" max height Battery Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	14"	Battery	Red
8 HP Red 14" max height Battery Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	18"	Battery	Red
10 HP Red 14" max height Battery Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	18"	Battery	Red
8 HP Red 14" max height Battery Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	24"	Battery	Red
10 HP Red 14" max height Battery Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	24"	Battery	Red
5 HP Red 14" max height Plug-in Start Snow Blower	2AGX-05HP	0.5 Liter	5 HP	14"	Plug-in	Red
8 HP Red 14" max height Plug-in Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	14"	Plug-in	Red
10 HP Red 14" max height Plug-in Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	14"	Plug-in	Red
8 HP Red 14" max height Plug-in Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	18"	Plug-in	Red
10 HP Red 14" max height Plug-in Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	18"	Plug-in	Red
8 HP Red 14" max height Plug-in Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	24"	Plug-in	Red
10 HP Red 14" max height Plug-in Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	24"	Plug-in	Red
5 HP Green 14" max height Pull Start Snow Blower	2AGX-05HP	0.5 Liter	5 HP	14"	Pull	Green
8 HP Green 14" max height Pull Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	14"	Pull	Green
10 HP Green 14" max height Pull Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	14"	Pull	Green
8 HP Green 18" max height Pull Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	18"	Pull	Green
10 HP Green 18" max height Pull Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	18"	Pull	Green
8 HP Green 24" max height Pull Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	24"	Pull	Green
10 HP Green 24" max height Pull Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	24"	Pull	Green
5 HP Green 14" max height Battery Start Snow Blower	2AGX-05HP	0.5 Liter	5 HP	14"	Battery	Green
8 HP Green 14" max height Battery Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	14"	Battery	Green
10 HP Green 14" max height Battery Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	14"	Battery	Green
8 HP Green 14" max height Battery Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	18"	Battery	Green
10 HP Green 14" max height Battery Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	18"	Battery	Green
8 HP Green 14" max height Battery Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	24"	Battery	Green
10 HP Green 14" max height Battery Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	24"	Battery	Green
5 HP Green 14" max height Plug-in Start Snow Blower	2AGX-05HP	0.5 Liter	5 HP	14"	Plug-in	Green
8 HP Green 14" max height Plug-in Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	14"	Plug-in	Green
10 HP Green 14" max height Plug-in Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	14"	Plug-in	Green
8 HP Green 14" max height Plug-in Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	18"	Plug-in	Green
10 HP Green 14" max height Plug-in Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	18"	Plug-in	Green
8 HP Green 14" max height Plug-in Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	24"	Plug-in	Green
10 HP Green 14" max height Plug-in Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	24"	Plug-in	Green
5 HP Beige 14" max height Pull Start Snow Blower	2AGX-05HP	0.5 Liter	5 HP	14"	Pull	Beige
8 HP Beige 14" max height Pull Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	14"	Pull	Beige
10 HP Beige 14" max height Pull Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	14"	Pull	Beige

8 HP Beige 18" max height Pull Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	18"	Pull	Beige
10 HP Beige 18" max height Pull Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	18"	Pull	Beige
8 HP Beige 24" max height Pull Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	24"	Pull	Beige
10 HP Beige 24" max height Pull Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	24"	Pull	Beige
5 HP Beige 14" max height Battery Start Snow Blower	2AGX-05HP	0.5 Liter	5 HP	14"	Battery	Beige
8 HP Beige 14" max height Battery Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	14"	Battery	Beige
10 HP Beige 14" max height Battery Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	14"	Battery	Beige
8 HP Beige 14" max height Battery Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	18"	Battery	Beige
10 HP Beige 14" max height Battery Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	18"	Battery	Beige
8 HP Beige 14" max height Battery Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	24"	Battery	Beige
10 HP Beige 14" max height Battery Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	24"	Battery	Beige
5 HP Beige 14" max height Plug-in Start Snow Blower	2AGX-05HP	0.5 Liter	5 HP	14"	Plug-in	Beige
8 HP Beige 14" max height Plug-in Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	14"	Plug-in	Beige
10 HP Beige 14" max height Plug-in Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	14"	Plug-in	Beige
8 HP Beige 14" max height Plug-in Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	18"	Plug-in	Beige
10 HP Beige 14" max height Plug-in Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	18"	Plug-in	Beige
8 HP Beige 14" max height Plug-in Start Snow Blower	2AGX-08HP	1.0 Liter	8 HP	24"	Plug-in	Beige
10 HP Beige 14" max height Plug-in Start Snow Blower	2AGX-10HP	1.5 Liter	10 HP	24"	Plug-in	Beige

SUMMARY TABLE A

As can be seen, the two tables of the present invention are not even remotely similar to that of Hind. Further, the claims clearly set forth these differences.

In view of the above, Appellants respectfully request reversal of the rejections.

*2. Dependent Claims 13, 39, and 65 Are Merely Objected To*

Dependent claims 13, 39, and 65 have merely been objected to as being dependent on a rejected base claim.

*3. Dependent Claims 16, 42, and 68 are Not Separately Argued*

*4. Dependent Claims 18, 44 and 70 are Patentable Over the Cited Art*

Claims 18, 44, and 70 provide that the calculations eliminate duplicate expanded table rows.

In rejecting these claims, the final Office Action merely refers to Hind col. 8, lines 44-59 which provides:

This first aspect takes advantage of a feature of XML parsers, and the manner in which such parsers are designed to process "entities" within a file. An entity is "a collection of characters that can be referenced as a unit", according to the SGML standard. An entity is encoded using a special XML construct, and is used to substitute a text string or a file into a document. For purposes of the present invention, the pertinent substitution is the text string mechanism. Note that this same construct is defined in SGML, and would therefore likely be available in any notation derived from SGML.

Accordingly, while the technique of this first aspect is described in terms of a file encoded in the XML notation, it may also be used advantageously with a file encoded according to any other tag syntax where a processing tool such as the XML parser performs the type of textual substitution for entity declarations that will now be described.

As can be seen from this text, nowhere is there any teaching, suggestion, or description of the elimination of duplicate rows of a table based on a calculation. Instead, the text merely describes how to substitute a text string. Such a reference and rejection wholly ignores the claim limitations.

Under MPEP §2142 and 2143.03 “To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).”

In view of the above, Appellants respectfully request reversal of the rejection of claims 18, 44, and 70.

#### *5. Dependent Claims 19, 45 and 71 are Not Separately Argued*

#### *6. Dependent Claims 20, 46 and 72 are Patentable Over the Cited Art*

Claims 20, 46, and 72 provide that the calculations are selected through a graphical user interface.

In rejecting these claims, the Office Action refers to col. 7, lines 38-67 “where the calculations are selected when the user selects a file”. Col. 7, lines 38-67 provides:

In the preferred embodiment, the present invention is implemented as one or more computer software programs. The implementation of the software that compresses XML and/or DTD files may operate on a server in a network, as one or more modules (also referred to as code subroutines, or "objects" in object-oriented programming) which are invoked upon request. Alternatively, the compression software may operate on a user's workstation. The logic implementing this file compression may be integrated with the code of a program which creates the XML or DTD files, or it may be implemented as one or more separate utility modules, which provide compression that is performed after the XML or DTD file has been created, without deviating from the inventive concepts disclosed herein. Similarly, the file decompression software (where applicable, as discussed in detail below) may operate on a server, or on a user's workstation, and this software may be provided in one or more separate utility modules that are invoked to decompress the file content before using it in an application, or it may be integrated into an application that processes the files. The server may be functioning as a Web server, where that Web server provides services in response to requests from a client connected through the Internet. Alternatively, the server may be in a corporate intranet or extranet of which the client's workstation is a component, or in any other network environment. While the preferred embodiment anticipates that the compressed files are sent over a network connection, the file content may also be transferred between computers via a storage media (such as diskette), without deviating from the inventive concepts disclosed herein.

Appellants respectfully traverse and disagree with the rejection. As can be seen from the above text, Hind merely states that the logic can be implemented and performed on a user's machine. In addition, contrary to that asserted by the Examiner, the above text does NOT state that calculations are selected when a user selects a file. In this regard, the above text does not describe or even suggest that a user selects a file whatsoever. Instead, the text describes the general use of object oriented programming and the integration of logic with code that creates XML or DTD files. Not even a remote reference to a graphical user interface is disclosed in the cited text.

In view of the above, Appellants respectfully request reversal of the rejection of claims 20, 46, and 72.

*7. Dependent Claims 21, 47 and 73 Are Not Separate Argued*

*8. Dependent Claims 23, 49 and 75 Are Not Separately Argued*

*9. Dependent Claims 24, 50 and 76 Are Patentable Over the Cited Art*

Dependent claims 24, 50, and 76 provide that the logic for expanding the data into the expanded table is fully defined within the data package and the data.

In rejecting these claims, the final Office Action merely refers to Hind col. 8, lines 38-43. As described above, such text merely refers to the ability to substitute text. Appellants refer the Board to the arguments above with respect to the lack of teaching in Hind relating to the expanded table and the data package.

In addition, Appellants note that the logic for actually expanding the data must be contained and defined in the package (as claimed). Even assuming that Hind's text substitution is equivalent to the expansion (which Appellants traverse as indicated above), the logic for actually performing or causing Hind to perform the text substitution is not contained within the XML file. Instead, the XML parser must be configured to read the notation and perform the textual substitution. Accordingly, Hind actually teaches away from incorporating such logic in the XML file.

In view of the above, Appellants respectfully request reversal of the rejection of claims 24, 50, and 76.

B. Claims 14-15, 40-41, and 66-67 are Patentable under 35 U.S.C. §103(a) over Hind in view of Sasaki et al. (U.S. Patent No. 6,434,623)(Sasaki).

*1. Dependent Claims 14, 40, and 66 Are Patentable Over the Cited Art*

Dependent claims 14, 40, and 66 provide that calculations are applied to test the validity of the expanded table rows and only valid rows are maintained in the table.

The final Office Action admits that Hind fails to teach this aspect of the invention. To teach these claims, the Action relies on Sasaki col. 5, line 64-col. 6, line 25, which provides:

In the data sink 200, as shown in FIG. 1, the first file receiving means 201 receives the data file having the file structure, as shown in FIG. 2. The data volume comparison means 202 determines a first data volume, which is representative of the amount of data actually received of the data file received by the first file receiving means 201, and compares the first data volume with a second data volume represented by the data volume information of the data file.

As a result of comparing the data volumes by the data volume comparison means 202, in the event that the first data volume is less than the second data volume, the shortage informing means 203 informs the data transmission unit 100 as a transmission source of the data file of the first data volume or a shortage data volume indicating a difference between the first data volume and the second data volume.

In the data transmission unit 100, upon receipt of a notice of the first data volume or the shortage data volume, the file generating means 102 produces a new data file including a shortage data portion, which is not received by the data sink 200 of the data in the data file transmitted from said first file transmitting means 101, and position information in the data file transmitted, which is associated with the shortage data portion. In the event that the data transmission unit 100 receives a notice of the first data volume, it is possible to know the shortage data portion by means of determining a difference between the first data volume noticed and the data volume (the second data volume) in the original data file in the data transmission unit 100.

As can be seen from this text, Sasaki merely describes the process of comparing a received data file to a second data volume and if there is a difference (i.e., shortage of data), a new data file with the shortage is produced. However, the ability to maintain data in a table if a row is valid based on calculations transmitted as part of the file (as claimed) is not taught, suggested, hinted at, alluded to, or even remotely contemplated in Sasaki.

Further, an electronic search of Sasaki for the term “table” produces no results whatsoever. Without even mentioning the term “table”, Sasaki cannot teach a claim that tests the validity of a row of a table and the ability to maintain a particular row based on such testing.

In addition, Sasaki is from a different field of art of both the present invention and Hind and the Action has failed to present any motivation to combine the two references.

In view of the above, Appellants respectfully request reversal of the rejection of claims 14,

40, and 66.

*2. Dependent Claims 15, 41, and 67 are Patentable Over the Cited Art*

Dependent claims 15, 41, and 67 provide that the calculations are used to perform a precursor conditional test that is used to test the validity of the expanded table rows.

In rejecting these claims, the Action again relies on Sasaki col. 5, line 64-col. 6, line 25. Such text does not describe or allude to a precursor conditional test that is performed on a row of a table.

Further, an electronic search of Sasaki for the term “table” produces no results whatsoever. Without even mentioning the term “table”, Sasaki cannot teach a claim that tests the validity of a row of a table and the ability to maintain a particular row based on such testing.

In addition, Sasaki is from a different field of art of both the present invention and Hind and the Action has failed to present any motivation to combine the two references.

In view of the above, Appellants respectfully request reversal of the rejection of claims 15, 41, and 67.

C. Claims 17, 43, and 69 are Patentable under 35 U.S.C. §103(a) over Hind in view of Shiba (U.S. Patent No. 6,480,124 B2)(Shiba).

As stated above, claims 17, 43, and 69 provide that the self-expanding data package comprises product data for use in a computer-aided design application.

In rejecting these claims, the Examiner took official notice that it would have been obvious to modify Hind to include the self-expanding data package comprises product data for use in a CAD application because it would allow information from one engineer using a CAD program to be transmitted to another engineer using a CAD program in an efficient manner.

Applicants appreciate the acknowledgement of the benefits of the present invention. However, not only is there a complete failure in Hind to even remotely suggest such product data (which is not claimed in the independent claims), but there is no suggestion to extend Hind into such an area and it would not be obvious for an engineer to utilize the method of the invention to transport product data as claimed. In this regard, the Examiner takes Official Notice of the obviousness of the invention without any foundation or support in the prior art whatsoever. Applicants note that it is improper to take Official Notice of the obviousness of the invention.

Instead, Official Notice is only proper for a fact. In this regard, the present Office Action fails to take Official Notice of any such fact.

Further, under MPEP 2144.03, there must be some form of evidence in the record to support an assertion of common knowledge. See *Lee*, 277 F.3d at 1344-45, 61 USPQ2d at 1434-35 (Fed. Cir. 2002); *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697. There is no form of such evidence in the present record.

In addition, in accordance with MPEP 2144.03(C), Applicants previously challenged the Official Notice and any factual assertion contained therein as not properly officially noticed or not properly based upon common knowledge. In this regard, Applicants requested that under MPEP 2144.03(C), the Examiner must provide support for the finding/Office Notice with adequate documentary evidence. Applicants submitted that the examiner was required to provide documentary evidence if the rejection was to be maintained. See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 ("[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings" to satisfy the substantial evidence test). However, to date, the Examiner has failed to provide such evidence.

The Final Office Action responded to the above arguments by arguing that the limitation was a field of use limitation and has no limiting effect. Appellants disagree with and traverse such assertions in accordance with the arguments submitted above.

In view of the above, Appellants respectfully request reversal of the rejection of claims 17, 43, and 69.

D. Claims 22, 48, and 74 are Patentable under 35 U.S.C. §103(a) over Hind in view of the Examiner's Official Notice (Official Notice).

Claims 22, 48, and 74 provide that the calculations comprise filters that limit results displayed from the expanded table rows.

In rejecting these claims, the Office Action acknowledges the lack of such a teaching in Hind. Instead, the Examiner takes Official Notice:

that is would have been obvious for one of ordinary skill in the art at the time the invention was made to have modified Hind et al., to include wherein the self-expanding data package comprises one or more filters that limits results displayed from the expanded table rows because this would allow comment fields (i.e., <!--comment here -->) inside the XML that would allow someone reading the raw XML file to more fully understand what the data means.



Appellants respectfully traverse and disagree with such assertions and such Official Notice. Firstly, Appellants note that the Examiner takes Official Notice of the obviousness of the invention without any foundation or support in the prior art whatsoever. It is improper to take Official Notice of the obviousness of the invention. Instead, Official Notice is only proper for a fact. In this regard, the present Office Action fails to take Official Notice of any such fact.

Further, under MPEP 2144.03, there must be some form of evidence in the record to support an assertion of common knowledge. See *Lee*, 277 F.3d at 1344-45, 61 USPQ2d at 1434-35 (Fed. Cir. 2002); *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697. There is no form of such evidence in the present record. In addition, in accordance with MPEP 2144.03(C), Appellants submit that any factual assertion contained in the Official Notice is not properly based upon common knowledge.

In addition, Appellants note that the ability to put in comment fields to allow someone reading raw XML to understand what the data means does not act as a filter (as claimed) in any way, shape, or form. Further, the use of comments would not limit results displayed from expanded table rows. Again, there is no similarity between the present invention and Hind. In this regard, Hind is so distinguishable from the present invention, that any comparison that attempts to draw similarities such as that set forth in the final Office Action would be illogical and wholly without merit.

In view of the above, Appellants respectfully request reversal of the rejection of claims 22, 48, and 74.

## VIII. CONCLUSION

In light of the above arguments, Appellants respectfully submit that the cited references do not anticipate nor render obvious the claimed invention. More specifically, Appellants' claims recite novel physical features which patentably distinguish over any and all references under 35 U.S.C. §§ 102 and 103. As a result, a decision by the Board of Patent Appeals and Interferences reversing the Examiner and directing allowance of the pending claims in the subject application is respectfully solicited.

Respectfully submitted,

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## CLAIMS APPENDIX

1. (WITHDRAWN) A self-expanding product data package for product data comprising:
  - basic table data having one or more table rows, wherein each row represents a partial definition of a product;
  - a set of one or more constant lists having one or more values; and
  - one or more row validation calculations;wherein use of the set of constant lists and row validation calculations provides a mechanism for compact data storage, wherein the self-expanding data package is capable of expansion into an expanded table having expanded table rows wherein each expanded table row represents a product and comprises a combination such that:
  - for each constant list of values, every list member is combined with all other basic table rows and additional list members to produce every possible combination; and
  - the row validation calculations are applied to test validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.
2. (WITHDRAWN) The self-expanding data package of claim 1 further comprising a calculation utilized to perform a precursor conditional test that is used in one or more row validation calculations.
3. (WITHDRAWN) The self-expanding data package of claim 1 further comprising a calculation utilized to provide additional data used in the expanded table
4. (WITHDRAWN) The self-expanding data package of claim 1 wherein the self-expanding data package comprises product data for use in a computer-aided design application.
5. (WITHDRAWN) The self-expanding data package of claim 1 wherein the one or more of the row validation calculations provide for eliminating duplicate expanded table rows.

6. (WITHDRAWN) The self-expanding data package of claim 1 wherein the basic table data, set of one or more constant lists, and one or more row validation calculations are specified using extensible markup language (XML).

7. (WITHDRAWN) The self-expanding data package of claim 1 wherein the row validation calculations are selected through a graphical user interface.

8. (WITHDRAWN) The self-expanding data package of claim 1 wherein the self-expanding data package is transmitted across a network.

9. (WITHDRAWN) The self-expanding data package of claim 1 wherein one or more row validation calculations comprise one or more filters that limit results displayed from the expanded table rows.

10. (WITHDRAWN) The self-expanding data package of claim 1 wherein an editor provides an ability to directly edit the self-expanding data package.

11. (WITHDRAWN) The self-expanding data package of claim 1 wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

12. (PREVIOUSLY PRESENTED) A method for generating product data in a self-expanding data package in a computer system comprising:

generating one or more values in a set of one or more constant lists and storing said one or more values in the self-expanding data package, wherein the self-expanding data package is for product data;

generating one or more calculations that operate on one or more values in the set of one or more constant lists and storing said one or more calculations in the self-expanding data package;

transmitting the self-expanding data package to a second computer system that expands the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row represents a product and comprises a combination and each combination is

generated by combining every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

13. (PREVIOUSLY PRESENTED) The method of claim 12 further comprising, generating one or more basic table data having one or more table rows, and storing said one or more basic table data in the self expanding data package, wherein the self-expanding data package is further expanded by combining every value in each constant list with each basic table row.

14. (PREVIOUSLY PRESENTED) The method of claim 12, wherein one or more calculations are applied to test validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.

15. (PREVIOUSLY PRESENTED) The method of claim 14, wherein one or more calculations are utilized to perform a precursor conditional test that is used to test validity of the expanded table rows.

16. (PREVIOUSLY PRESENTED) The method of claim 12, wherein one or more calculations are utilized to provide additional data used in the expanded table.

17. (ORIGINAL) The method of claim 12, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

18. (ORIGINAL) The method of claim 12, wherein one or more calculations provide for eliminating duplicate expanded table rows.

19. (ORIGINAL) The method of claim 12, wherein the self-expanding data package is written in extensible markup language (XML).

20. (ORIGINAL) The method of claim 12, wherein one or more calculations are selected through a graphical user interface.

21. (ORIGINAL) The method of claim 12, wherein the self-expanding data package is transmitted across a network.

22. (ORIGINAL) The method of claim 12, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

23. (PREVIOUSLY PRESENTED) The method of claim 12, wherein an editor is used to directly edit the self-expanding data package.

24. (ORIGINAL) The method of claim 12, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

25. (WITHDRAWN) A method for utilizing product data in a self-expanding data package in a computer system comprising:

receiving a self-expanding data package comprising one or more values in a set of one or more constant lists and one or more calculations that operate on one or more values in the set of one or more constant lists, wherein the self-expanding data package is for product data;

expanding the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row represents a product and comprises a combination and each combination is generated by combining every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

26. (WITHDRAWN) The method of claim 25, wherein:  
the self-expanding data package further comprises one or more basic table data having one or more table rows; and  
the expanding further comprises combining every value in each constant list with each basic table row.

27. (WITHDRAWN) The method of claim 25, wherein:

one or more calculations test validity of the expanded table rows; and  
only those expanded table rows that are valid are maintained in the expanded table.

28. (WITHDRAWN) The method of claim 27, wherein one or more calculations perform a precursor conditional test that is used to test validity of the expanded table rows.

29. (WITHDRAWN) The method of claim 25, wherein one or more calculations provide additional data used in the expanded table

30. (WITHDRAWN) The method of claim 25, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

31. (WITHDRAWN) The method of claim 25, wherein one or more calculations eliminate duplicate rows or otherwise apply business rules to eliminate unwanted rows in the resulting expanded table.

32. (WITHDRAWN) The method of claim 25, wherein the self-expanding data package is written in extensible markup language (XML).

33. (WITHDRAWN) The method of claim 25, wherein one or more calculations are selected through a graphical user interface.

34. (WITHDRAWN) The method of claim 25, wherein the self-expanding data package is received from across a network.

35. (WITHDRAWN) The method of claim 25, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

36. (WITHDRAWN) The method of claim 25, wherein an editor provides an ability to directly edit the self-expanding data package.

37. (WITHDRAWN) The method of claim 25, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

38. (PREVIOUSLY PRESENTED) An apparatus for generating product data in a self-expanding data package in a computer system comprising:

- (a) a computer system having a memory and a data storage device coupled thereto;
- (b) one or more computer programs, performed by the computer system, for generating a self-expanding data package and storing the self-expanding data package in the memory, wherein the self-expanding data package is for product data and comprises:
  - (i) one or more values in a set of one or more constant lists; and
  - (ii) one or more calculations that operate on one or more values in the set of one or more constant lists;

wherein the self-expanding data package is transmitted to a second computer system that expands the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row represents a product and comprises a combination and each combination is generated by combining every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

39. (PREVIOUSLY PRESENTED) The apparatus of claim 38, wherein:  
the self-expanding data package further comprises one or more basic table data having one or more table rows; and

the self-expanding data package is further expanded by combining every value in each constant list with each basic table row.

40. (PREVIOUSLY PRESENTED) The apparatus of claim 38, wherein one or more calculations are applied to test validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.



41. (PREVIOUSLY PRESENTED) The apparatus of claim 40, wherein one or more calculations are utilized to perform a precursor conditional test that can be used to test validity of the expanded table rows.

42. (PREVIOUSLY PRESENTED) The apparatus of claim 38, wherein one or more calculations are utilized to provide additional data used in the expanded table

43. (ORIGINAL) The apparatus of claim 38, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

44. (ORIGINAL) The apparatus of claim 38, wherein one or more calculations provide for eliminating duplicate expanded table rows.

45. (ORIGINAL) The apparatus of claim 38, wherein the self-expanding data package is written in extensible markup language (XML).

46. (ORIGINAL) The apparatus of claim 38, further comprising a graphical user interface displayed by the computer system for selecting the one or more calculations.

47. (ORIGINAL) The apparatus of claim 38, wherein the one or more computer programs are further configured to transmit the self-expanding data package across a network.

48. (ORIGINAL) The apparatus of claim 38, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

49. (PREVIOUSLY PRESENTED) The apparatus of claim 38, wherein one or more of the computer programs comprise an editor that is used to directly edit the self-expanding data package.

50. (ORIGINAL) The apparatus of claim 38, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

51. (WITHDRAWN) An apparatus for utilizing product data in a self-expanding data package in a computer system comprising:

- (a) a computer system having a memory and a data storage device coupled thereto;
- (b) one or more computer programs, performed by the computer system, for receiving a self-expanding data package stored in the memory, wherein the self-expanding data package is for product data and the self-expanding data package comprises :

- (i) one or more values in a set of one or more constant lists; and
  - (ii) one or more calculations that operate on one or more values in the set of one or more constant lists; and
- (c) one or more computer programs, performed by the computer system, for expanding the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row represents a product and comprises a combination and each combination is generated by combining every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

52. (WITHDRAWN) The apparatus of claim 51, wherein:  
the self-expanding data package further comprises basic table data having one or more table rows; and

the computer program is further configured to expand the self-expanding data package by combining every value in each constant list with each basic table row.

53. (WITHDRAWN) The apparatus of claim 51, wherein one or more calculations are applied to test validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.

54. (WITHDRAWN) The apparatus of claim 53, wherein one or more calculations are utilized to perform a precursor conditional test that is used to test validity of the expanded table rows.

55. (WITHDRAWN) The apparatus of claim 51, wherein one or more calculations are utilized to provide additional data used in the expanded table

56. (WITHDRAWN) The apparatus of claim 51, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

57. (WITHDRAWN) The apparatus of claim 51, wherein one or more calculations provide for eliminating duplicate expanded table rows.

58. (WITHDRAWN) The apparatus of claim 51, wherein the self-expanding data package is written in extensible markup language (XML).

59. (WITHDRAWN) The apparatus of claim 51, further comprising a graphical user interface displayed by the computer system for selecting the one or more calculations.

60. (WITHDRAWN) The apparatus of claim 51, wherein the self-expanding data package is received from across a network.

61. (WITHDRAWN) The apparatus of claim 51, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

62. (WITHDRAWN) The apparatus of claim 51, further comprising an editor performed by the computer system that provides an ability to directly edit the self-expanding data package.

63. (WITHDRAWN) The apparatus of claim 51, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

64. (PREVIOUSLY PRESENTED) An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the

computer to perform a method for generating product data in a self-expanding data package in a computer system, the method comprising:

generating, in the self-expanding data package, one or more values in a set of one or more constant lists, wherein the self-expanding data package is for product data;

generating, in the self-expanding data package, one or more calculations that operate on one or more values in the set of one or more constant lists;

wherein the self-expanding data package is transmitted to a second computer system that expands the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row represents a product and comprises a combination and each combination is generated by combining every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

65. (PREVIOUSLY PRESENTED) The article of manufacture of claim 64, the method further comprising, generating, in the self-expanding data package, basic table data having one or more table rows, wherein the self-expanding data package is further expanded by combining every value in each constant list with each basic table row.

66. (PREVIOUSLY PRESENTED) The article of manufacture of claim 64, wherein one or more calculations are applied to test a validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.

67. (PREVIOUSLY PRESENTED) The article of manufacture of claim 66, wherein one or more calculations are utilized to perform a precursor conditional test that is used to test validity of the expanded table rows.

68. (PREVIOUSLY PRESENTED) The article of manufacture of claim 64, wherein one or more calculations are utilized to provide additional data used in the expanded table

69. (ORIGINAL) The article of manufacture of claim 64, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

70. (PREVIOUSLY PRESENTED) The article of manufacture of claim 64, wherein one or more calculations eliminate duplicate expanded table rows.

71. (ORIGINAL) The article of manufacture of claim 64, wherein the self-expanding data package is written in extensible markup language (XML).

72. (ORIGINAL) The article of manufacture of claim 64, wherein one or more calculations are selected through a graphical user interface.

73. (ORIGINAL) The article of manufacture of claim 64, wherein the method further comprises transmitting the self-expanding data package across a network.

74. (ORIGINAL) The article of manufacture of claim 64, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

75. (PREVIOUSLY PRESENTED) The article of manufacture of claim 64, wherein an editor is used to directly edit the self-expanding data package.

76. (ORIGINAL) The article of manufacture of claim 64, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

77. (WITHDRAWN) An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to perform a method for utilizing product data in a self-expanding data package in a computer system, the method comprising:

(a) receiving a self-expanding data package wherein the self-expanding data package is for product data and the self-expanding data package comprises:

- (i) one or more values in a set of one or more constant lists; and
- (ii) one or more calculations that operate on one or more values in the set of one or more constant lists; and

(b) expanding the self-expanding data package into an expanded table having expanded table rows, wherein each expanded table row represents a product and comprises a combination and each combination is generated by combining every value in each constant list with any combination of values from remaining parameters and performing the one or more calculations on the one or more values, wherein the one or more calculations eliminate one more expanded table rows.

78. (WITHDRAWN) The article of manufacture of claim 77, wherein:  
the self-expanding data package further comprises basic table data having one or more table rows; and

the self-expanding data package is further expanded by combining every value in each constant list with each basic table row.

79. (WITHDRAWN) The article of manufacture of claim 77, wherein one or more calculations are applied to test validity of the expanded table rows, and only those expanded table rows that are valid are maintained in the expanded table.

80. (WITHDRAWN) The article of manufacture of claim 79, wherein one or more calculations are utilized to perform a precursor conditional test that is used to test validity of the expanded table rows.

81. (WITHDRAWN) The article of manufacture of claim 77, wherein one or more calculations are utilized to provide additional data used in the expanded table

82. (WITHDRAWN) The article of manufacture of claim 77, wherein the self-expanding data package comprises product data for use in a computer-aided design application.

83. (WITHDRAWN) The article of manufacture of claim 77, wherein one or more calculations provide for eliminating duplicate expanded table rows.

84. (WITHDRAWN) The article of manufacture of claim 77, wherein the self-expanding data package is written in extensible markup language (XML).

85. (WITHDRAWN) The article of manufacture of claim 77, wherein one or more calculations are selected through a graphical user interface.

86. (WITHDRAWN) The article of manufacture of claim 77, wherein the self-expanding data package is received from across a network.

87. (WITHDRAWN) The article of manufacture of claim 77, wherein one or more calculations comprise one or more filters that limit results displayed from the expanded table rows.

88. (WITHDRAWN) The article of manufacture of claim 77, wherein an editor provides an ability to directly edit the self-expanding data package.

89. (WITHDRAWN) The article of manufacture of claim 77, wherein logic for expanding the data package into the expanded table is fully defined within the data package and the data.

## EVIDENCE APPENDIX

None.



## RELATED PROCEEDINGS APPENDIX

None.